UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,245	09/03/2003	Kang Soo Seo	46500-000599/US	2814

30593   7590   06/08/2009
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

EXAMINER
CHOI, MICHAEL P

ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
06/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/653,245	SEO ET AL.
	Examiner	**Art Unit**	
	Michael Choi	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 March 2009*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 12-39* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-7 and 12-39* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible

for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has

been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37

CFR 1.114. Applicant's submission filed on 3/24/09 has been entered.

Double Patenting

2.   The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent
possible harassment by multiple assignees.   A nonstatutory obviousness-type double patenting
rejection is appropriate where the conflicting claims are not identical, but at least one examined
application claim is not patentably distinct from the reference claim(s) because the examined
application claim is either anticipated by, or would have been obvious over, the reference
claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re
Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re
Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163
USPQ 644 (CCPA 1969).
        A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be
used to overcome an actual or provisional rejection based on a nonstatutory double patenting
ground provided the conflicting application or patent either is shown to be commonly owned with
this application, or claims an invention made as a result of activities undertaken within the scope
of a joint research agreement.
        Effective January 1, 1994, a registered attorney or agent of record may sign a terminal
disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3.   Claims 1-7 and 12-39 are provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claims 1, 10, 13, 21, 24, 25, 26,

27 of copending Application No. 10/766,211 in view of Maruyama et al. (US 6,385,289 B1).

Regarding Claim 1 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of amended '211 teaches everything except what is recited below (e.g. – a data area storing at least first and second still images and wherein a storing area per clip is associated with two images), but rejected in combination with Maruyama et al. as seen where a computer-readable medium having a data structure for managing reproduction of still images recorded on the computer-readable medium, comprising:

- a data area storing at least first and second still images (see Fig. 3 – data area having VOBU containing video packs (Fig. 11) - first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33); and

- a playlist area storing at least one playlist (Fig. 3 – having a program chain in audio & video data area), the playlist including mark information (Fig. 8 – having a cell ID number within a program chain), the mark information providing presentation information on the first and second still images to provide for at least skipping (Fig. 8 – program chains skipping between various cells, having still images) from reproducing the first still image to reproducing the second still image (Fig. 11 – C_IDN#1 having a navigation pack containing presentation control information); and

- a management area storing at least a first and second clip information file (see Fig. 8, DA – storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85), the first and the second clip information files corresponding to the first and second still image (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of

secondary VOBU to be image #2; Col. 12, lines 26-33), respectively, the first clip information file including a mapping information between a presentation time and the first still image, the second information file including a mapping information between a presentation time and the second still image (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the more than one clip information with its associated images so as to allow for video reproduction as opposed to just a single image per clip, thereby allow longer reproduction of scenes.

Regarding Claim 2 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of '211 teaches the limitations of the elementary claim in combination with Maruyama but does not explicitly teach the limitation of this dependent claim. Therefore, Maruyama et al. teaches the computer-readable medium of claim 1, wherein the mark information includes a first mark associated with the first still image and a second mark associated with the second still image, the first and second marks providing the presentation information on the first and second still images, respectively (Figs. 11, 27 – C_IDN#1 having a video object unit and C_IDN#2 having a video object unit each containing a navigation pack with presentation control – Figs. 12, 13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have marks to enable user to define position of playback.

Regarding Claim 3 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of '211 teaches the limitations of the elementary claim in combination with Maruyama but does not

explicitly teach the limitation of this dependent claim. Therefore, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark includes a first indicator indicating at least a stream of data where the first mark is placed (Figs. 12, 27 – VOBU, 1411 containing a navigation pack (Fig. 11) having a pack header (Fig. 12, 110)); and the second mark includes a second indicator indicating at least a stream of data where the second mark is placed (Figs. 12, 27 – VOBU, 1412 containing a navigation pack (Fig. 11) having a pack header (Fig. 12, 110)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have marks to enable user to define position of playback.

Regarding Claim 4 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of '211 teaches the limitations of the elementary claim in combination with Maruyama but does not explicitly teach the limitation of this dependent claim. Therefore, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark includes a first indicator indicating a point in a stream of data where the first mark is placed (Figs. 12, 27 – VOBU, 1411 containing a navigation pack (Fig. 11) having a pack and system header (Fig. 12, 110, 111)); and the second mark includes a second indicator indicating a point in a stream of data where the second mark is placed (Figs. 12, 27 – VOBU, 1412 containing a navigation pack (Fig. 11) having a pack and system header (Fig. 12, 110, 111)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have marks to enable user to define position of playback.

Regarding Claim 5 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of '211 teaches the limitations of the elementary claim in combination with Maruyama but does not explicitly teach the limitation of this dependent claim. Therefore, Maruyama et al. teaches the

computer-readable medium of claim 2, wherein the first mark includes a type indicator indicating a type of the first mark, and the second mark includes a type indicator indicating a type of the second mark (Col. 14, lines 38+ - containing a stream ID for both pack and system headers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have marks to enable user to define position of playback.

Regarding Claim 6 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of '211 teaches the limitations of the elementary claim in combination with Maruyama but does not explicitly teach the limitation of this dependent claim. Therefore, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the mark information indicates a number of marks in the mark information (Fig. 27 – VOBU containing various sector numbers for each pack).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have marks to enable user to define position of playback.

Regarding Claim 7 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of '211 teaches the limitations of the elementary claim in combination with Maruyama but does not explicitly teach the limitation of this dependent claim. Therefore, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark points to the first still image and the second mark points to the second still image (Fig. 12 – wherein a first pack and system header associates with the subsequent video packs, each have a still picture for the first mark and second pack and system header associates with the subsequent video packs, 88, also having a still picture for the second mark).

It would have been obvious to one of ordinary skill in the art at the time the invention was

made to have marks to enable user to define position of playback.

Regarding Claim 12 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of

amended '211 teaches everything except what is recited below (e.g. – a data area storing at

least first and second still images and wherein a storing area per clip is associated with two

images), but rejected in combination where Maruyama et al. teaches a method of reproducing a

data structure for managing reproduction of still images recorded on the computer-readable

medium (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images

respective of VOBU, comprising:

- reproducing at least one playlist from the computer-readable medium, the playlist

  including mark information (Fig. 8 – having a cell ID number within a program chain), the

  mark information providing presentation information on first and second still images to

  provide for at least skipping (Fig. 8 – program chains skipping between various cells,

  having still images) from reproducing the first still image to reproducing the second still

  image (Fig. 11 – C_IDN#1 having a navigation pack containing presentation control

  information; Col. 12, lines 26-33 – each VOBU having playback time of group of pictures,

  images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having

  also a recorded presentation time stamp; Fig. 12); and

- a management area storing at least a first and second clip information file (see Fig. 8,

  DA – storage of control information, having VTS's and video and picture objects; Fig. 11

  – VTS having VOBS therein VOBUs 1 and 2, 85), the first and the second clip

  information files corresponding to the first and second still image (Fig. 11 – first VOBU

  having video pack which comprises images wherein examiner takes first image of first

video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33), respectively, the first clip information file including a mapping information between a presentation time and the first still image, the second information file including a mapping information between a presentation time and the second still image (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the more than one clip information with its associated images so as to allow for video reproduction as opposed to just a single image per clip, thereby allow longer reproduction of scenes.

Regarding Claim 13 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of amended '211 teaches everything except what is recited below (e.g. – a data area storing at least first and second still images and wherein a storing area per clip is associated with two images), but rejected in combination where Maruyama et al. teaches an apparatus for reproducing a data structure for managing reproduction of still images recorded on the computer-readable medium, comprising:

- a pick up configured to reproduce data recorded on the computer-readable medium (Fig. 19, 32);

- a controller configured to control the pick up (Fig. 19, 36) to reproduce at least one playlist file and at least a first and a second clip information file from the computer-readable medium (in at least Col. 2, Lines 30-35 – playback of program chains – Fig. 34; see Fig. 8, DA – storage of control information, having VTS's and video and picture

objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85), the playlist including

mark information (Fig. 8 – having a cell ID number within a program chain), the mark

information providing presentation information on first and second still images (Fig. 11 –

C_IDN#1 having a navigation pack containing presentation control information; Col. 12,

lines 26-33 – each VOBU having playback time of group of pictures, images respective

of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded

presentation time stamp; Fig. 12) to provide for at least skipping from reproducing the

first still image to reproducing the second still image (Fig. 8 – program chains skipping

between various cells, having still images), the first and the second clip information files

corresponding to the first and second still image (Fig. 11 – first VOBU having video pack

which comprises images wherein examiner takes first image of first video pack to be

image #1 of initial VOBU and first image of first video pack of secondary VOBU to be

image #2; Col. 12, lines 26-33), respectively, the first clip information file including a

mapping information between a presentation time and the first still image, the second

information file including a mapping information between a presentation time and the

second still image (Col. 12, lines 26-33 – each VOBU having playback time of group of

pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack

having also a recorded presentation time stamp; Fig. 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was

made to have the more than one clip information with its associated images so as to allow for

video reproduction as opposed to just a single image per clip, thereby allow longer reproduction

of scenes.

Regarding Claim 14 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of amended '211 teaches everything except what is recited below (e.g. – a data area storing at least first and second still images and wherein a storing area per clip is associated with two images), but rejected in combination where Maruyama et al. teaches a method of recording a data structure for managing reproduction of at least still images recorded on a computer-readable medium, comprising:

- recording (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area) at least one playlist file and at least a first and a second clip information file from the computer-readable medium (in at least Col. 2, Lines 30-35 – playback of program chains – Fig. 34; see Fig. 8, DA – storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85), the playlist including mark information (Fig. 8 – having a cell ID number within a program chain), the mark information providing presentation information on first and second still images (Fig. 11 – C_IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12) to provide for at least skipping from reproducing the first still image to reproducing the second still image (Fig. 8 – program chains skipping between various cells, having still images); and

- recording at least a first and a second information file in a management area on the computer-readable medium (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area), the first and the second clip information files corresponding to the first and second still image (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and

first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33),

respectively, the first clip information file including a mapping information between a

presentation time and the first still image, the second information file including a

mapping information between a presentation time and the second still image (Col. 12,

lines 26-33 – each VOBU having playback time of group of pictures, images respective

of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded

presentation time stamp; Fig. 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was

made to have the more than one clip information with its associated images so as to allow for

video reproduction as opposed to just a single image per clip, thereby allow longer reproduction

of scenes.

Regarding Claim 15 of the instant application, claims 1, 10, 13, 21, 24, 25, 26, 27 of

amended '211 teaches everything except what is recited below (e.g. – a data area storing at

least first and second still images and wherein a storing area per clip is associated with two

images), but rejected in combination where Maruyama et al. teaches an apparatus for recording

a data structure for managing reproduction of at least still images on a computer-readable

medium (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images

respective of VOBU), comprising:

- a pick up configured to record data on the computer-readable medium (Fig. 19, 32);

- a controller configured to control the pick up to record (Col. 26, lines 21+; Fig. 25 -
  recording of video and audio data in data area) at least one playlist file and at least a first
  and a second clip information file from the computer-readable medium (in at least Col. 2,
  Lines 30-35 – playback of program chains – Fig. 34; see Fig. 8, DA – storage of control

information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS

therein VOBUs 1 and 2, 85), the playlist including mark information (Fig. 8 – having a

cell ID number within a program chain), the mark information providing presentation

information on first and second still images (Fig. 11 – C_IDN#1 having a navigation pack

containing presentation control information; Col. 12, lines 26-33 – each VOBU having

playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 -

each respective video pack having also a recorded presentation time stamp; Fig. 12) to

provide for at least skipping from reproducing the first still image to reproducing the

second still image (Fig. 8 – program chains skipping between various cells, having still

images), the first clip information file (Fig. 11 – first VOBU having video pack which

comprises images wherein examiner takes first image of first video pack to be image #1

of initial VOBU and first image of first video pack of secondary VOBU to be image #2;

Col. 12, lines 26-33) including a mapping information between a presentation time and

the first still image and the second clip information file including a mapping information

between a presentation time and the second still image (Col. 12, lines 26-33 – each

VOBU having playback time of group of pictures, images respective of VOBU; Col. 14,

lines 11-15 - each respective video pack having also a recorded presentation time

stamp; Fig. 12), the first and the second clip information file corresponding to the first

and the second still image, respectively.

It would have been obvious to one of ordinary skill in the art at the time the invention was

made to have the more than one clip information with its associated images so as to allow for

video reproduction as opposed to just a single image per clip, thereby allow longer reproduction

of scenes.

Claims 16, 22, 28 and 34 are rejected under the same grounds as claim 2.

Claims 17, 23, 29 and 35 are rejected under the same grounds as claim 3.

Claims 18, 24, 30 and 36 are rejected under the same grounds as claim 4.

Claims 19, 25, 31 and 37 are rejected under the same grounds as claim 5.

Claims 20, 26, 32 and 38 are rejected under the same grounds as claim 6.

Claims 21, 27, 33 and 39 are rejected under the same grounds as claim 7.

This is a <u>provisional</u> obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-7 and 12-39 are rejected under 35 U.S.C. 102(e) as being anticipated by

Maruyama et al. (US 6,385,289 B1).

Regarding Claim 1, Maruyama et al. teaches a computer-readable medium having a

data structure for managing reproduction of still images recorded on the computer-readable

medium (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images

respective of VOBU, comprising:

- a data area storing at least a first clip stream file and a second clip stream file, the first

  clip stream file including video data for reproducing at least first and second still images,

  the second clip stream file including audio data (see Fig. 3 – data area having VOBU

  containing video packs (Fig. 11) - first VOBU having video pack which comprises images

  wherein examiner takes first image of first video pack to be image #1 of initial VOBU and

  first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33);

  and

- a playlist area storing at least one playlist (Fig. 3 – having a program chain in audio &

  video data area), the playlist including mark information (Fig. 8 – having a cell ID number

  within a program chain) and at least one playitem and a sub-playitem (Fig. 27, Col. 35,

  lines 45-61 – user defined program chain), the mark information providing presentation

  information on the first and second still images to provide for at least skipping (Fig. 8 –

  program chains skipping between various cells, having still images) from reproducing the

  first still image to reproducing the second still image (Fig. 11 – C_IDN#1 having a

  navigation pack containing presentation control information), the playitem indicating an

  in-point and an out-point of the first clip stream file for reproducing the first and second

  still images, the sub-playitem indicating an in-point and an out-point of the second clip

  stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 – user defined

  program chain); and

- a management area storing at least a first and second clip information file (see Fig. 8,

  DA – storage of control information, having VTS's and video and picture objects; Fig. 11

  – VTS having VOBS therein VOBUs 1 and 2, 85), the first and the second clip

information files corresponding to the first and second clip stream files (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33), the first clip information file including a mapping information between a presentation time and a unit of the first clip stream file, the second information file including a mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12).

Regarding Claim 2, Maruyama et al. teaches the computer-readable medium of claim 1, wherein the mark information includes a first mark associated with the first still image and a second mark associated with the second still image, the first and second marks providing the presentation information on the first and second still images, respectively (Figs. 11, 27 – C_IDN#1 having a video object unit and C_IDN#2 having a video object unit each containing a navigation pack with presentation control – Figs. 12, 13).

Regarding Claim 3, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark includes a first indicator indicating at least a stream of data where the first mark is placed (Figs. 12, 27 – VOBU, 1411 containing a navigation pack (Fig. 11) having a pack header (Fig. 12, 110)); and the second mark includes a second indicator indicating at least a stream of data where the second mark is placed (Figs. 12, 27 – VOBU, 1412 containing a navigation pack (Fig. 11) having a pack header (Fig. 12, 110)).

   Regarding Claim 4, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark includes a first indicator indicating a point in a stream of data where the first mark is placed (Figs. 12, 27 – VOBU, 1411 containing a navigation pack (Fig. 11) having a pack and system header (Fig. 12, 110, 111)); and the second mark includes a second indicator indicating a point in a stream of data where the second mark is placed (Figs. 12, 27 – VOBU, 1412 containing a navigation pack (Fig. 11) having a pack and system header (Fig. 12, 110, 111)).

   Regarding Claim 5, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark includes a type indicator indicating a type of the first mark, and the second mark includes a type indicator indicating a type of the second mark (Col. 14, lines 38+ - containing a stream ID for both pack and system headers).

   Regarding Claim 6, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the mark information indicates a number of marks in the mark information (Fig. 27 – VOBU containing various sector numbers for each pack).

   Regarding Claim 7, Maruyama et al. teaches the computer-readable medium of claim 2, wherein the first mark points to the first still image and the second mark points to the second still image (Fig. 12 – wherein a first pack and system header associates with the subsequent video packs, each have a still picture for the first mark and second pack and system header associates with the subsequent video packs, 88, also having a still picture for the second mark).

Regarding Claim 12, Maruyama et al. teaches a method of reproducing a data structure

for managing reproduction of still images recorded on the computer-readable medium (Col. 12,

lines 26-33 – each VOBU having playback time of group of pictures, images respective of

VOBU, comprising:

- reproducing at least a first clip stream file and a second clip stream file, the first clip
  stream file including video data for reproducing at least first and second still images, the
  second clip stream file including audio data (see Fig. 3 – data area having VOBU
  containing video packs (Fig. 11) - first VOBU having video pack which comprises images
  wherein examiner takes first image of first video pack to be image #1 of initial VOBU and
  first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33);

- reproducing at least one playlist file, the playlist including mark information (Fig. 8 –
  having a cell ID number within a program chain) and at least one playitem and a sub-
  playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the mark
  information providing presentation information on first and second still images to provide
  for at least skipping (Fig. 8 – program chains skipping between various cells, having still
  images) from reproducing the first still image to reproducing the second still image (Fig.
  11 – C_IDN#1 having a navigation pack containing presentation control information; Col.
  12, lines 26-33 – each VOBU having playback time of group of pictures, images
  respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a
  recorded presentation time stamp; Fig. 12), the playitem indicating an in-point and an
  out-point of the first clip stream file for reproducing the first and second still images, the
  sub-playitem indicating an in-point and an out-point of the second clip stream file for
  reproducing the audio data (Fig. 27, Col. 35, lines 45-61 – user defined program chain);
  and

- reproducing at least first and second clip information files, the first clip information file including a mapping information between a presentation time and a unit of the first clip stream file, and the second clip information file including a mapping information between a presentation time and a unit of the second clip stream file, the first and second clip information files being corresponded to the first and second clip stream files respectively.

- a management area storing at least a first and second clip information file (see Fig. 8, DA – storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85), the first and the second clip information files corresponding to the first and second clip stream files (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33), respectively, the first clip information file including a mapping information between a presentation time and a unit of the first clip stream file for the first still image, the second information file including a mapping information between a presentation time and a unit of the second clip stream file for the second still image (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12).

Regarding Claim 13, Maruyama et al. teaches an apparatus for reproducing a data structure for managing reproduction of still images recorded on the computer-readable medium, comprising:

- a pick up configured to reproduce data recorded on the computer-readable medium (Fig. 19, 32);

- a controller configured to control the pick up to reproduce at least a first clip stream file
  and a second clip file, the first clip stream file including video data for reproducing at
  least first and second still images, the second clip stream file including audio data (see
  Fig. 3 – data area having VOBU containing video packs (Fig. 11) - first VOBU having
  video pack which comprises images wherein examiner takes first image of first video
  pack to be image #1 of initial VOBU and first image of first video pack of secondary
  VOBU to be image #2; Col. 12, lines 26-33); and

- the controller configured to control the pick up (Fig. 19, 36) to reproduce at least one
  playlist file (in at least Col. 2, Lines 30-35 – playback of program chains – Fig. 34; see
  Fig. 8, DA – storage of control information, having VTS's and video and picture objects;
  Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85), the playlist including mark
  information (Fig. 8 – having a cell ID number within a program chain) and at least one
  playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the mark
  information providing presentation information on first and second still images (Fig. 11 –
  C_IDN#1 having a navigation pack containing presentation control information; Col. 12,
  lines 26-33 – each VOBU having playback time of group of pictures, images respective
  of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded
  presentation time stamp; Fig. 12) to provide for at least skipping from reproducing the
  first still image to reproducing the second still image (Fig. 8 – program chains skipping
  between various cells, having still images), the playitem indicating an in-point and an
  out-point the first clip stream file for reproducing the first and second still images, the
  sub-playitem indicating an in-point and an out-point of the second clip stream file for
  reproducing the audio data, (Fig. 27, Col. 35, lines 45-61 – user defined program chain),
  the first and the second clip information files corresponding to the first and second clip

stream files (Fig. 11 – first VOBU having video pack which comprises images wherein

examiner takes first image of first video pack to be image #1 of initial VOBU and first

image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33), the

first clip information file including a mapping information between a presentation time

and a unit of the first clip stream file, the second information file including a mapping

information between a presentation time and a unit of the second clip stream file (Col.

12, lines 26-33 – each VOBU having playback time of group of pictures, images

respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a

recorded presentation time stamp; Fig. 12).

Regarding Claim 14, Maruyama et al. teaches a method of recording a data structure

for managing reproduction of at least still images recorded on a computer-readable medium,

comprising:

- recording at least a first clip stream file and a second clip stream file, the first clip stream
  file including video data for reproducing at least first and second still images, the second
  clip stream file including audio data (see Fig. 3 – data area having VOBU containing
  video packs (Fig. 11) - first VOBU having video pack which comprises images wherein
  examiner takes first image of first video pack to be image #1 of initial VOBU and first
  image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33);

- recording (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area) at
  least one playlist file in a playlist area and at least a first and a second clip information
  file from the computer-readable medium (in at least Col. 2, Lines 30-35 – playback of
  program chains – Fig. 34; see Fig. 8, DA – storage of control information, having VTS's
  and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85),

the playlist including mark information (Fig. 8 – having a cell ID number within a program

chain) and playitem and a sub-playitem, (Fig. 27, Col. 35, lines 45-61 – user defined

program chain), the mark information providing presentation information on first and

second still images (Fig. 11 – C_IDN#1 having a navigation pack containing presentation

control information; Col. 12, lines 26-33 – each VOBU having playback time of group of

pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack

having also a recorded presentation time stamp; Fig. 12) to provide for at least skipping

from reproducing the first still image to reproducing the second still image (Fig. 8 –

program chains skipping between various cells, having still images), the playitem

indicating an in-point and an out-point of the first clip stream file for reproducing the first

and second still images, the sub-playitem indicating an in-point and an out-point of the

second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 –

user defined program chain); and

- recording at least a first and a second information file (Col. 26, lines 21+; Fig. 25 -

  recording of video and audio data in data area), the first and the second clip information

  files corresponding to the first and second clip stream files (Fig. 11 – first VOBU having

  video pack which comprises images wherein examiner takes first image of first video

  pack to be image #1 of initial VOBU and first image of first video pack of secondary

  VOBU to be image #2; Col. 12, lines 26-33), the first clip information file including a

  mapping information between a presentation time and a unit of the first clip stream file,

  the second information file including a mapping information between a presentation time

  and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOBU having

  playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 -

  each respective video pack having also a recorded presentation time stamp; Fig. 12).

      Regarding Claim 15, Maruyama et al. teaches an apparatus for recording a data structure for managing reproduction of at least still images on a computer-readable medium (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU), comprising:

- a pick up configured to record data on the computer-readable medium (Fig. 19, 32);

- a controller configured to control the pick up to record at least a first clip stream file and a second clip stream file, the first clip stream file including video data for reproducing at least first and second still images, the second clip stream file including audio data (see Fig. 3 – data area having VOBU containing video packs (Fig. 11) - first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33); and

- the controller configured to control the pick up to record (Col. 26, lines 21+; Fig. 25 - recording of video and audio data in data area) at least one playlist file (in at least Col. 2, Lines 30-35 – playback of program chains – Fig. 34; see Fig. 8, DA – storage of control information, having VTS's and video and picture objects; Fig. 11 – VTS having VOBS therein VOBUs 1 and 2, 85) and playitem and a sub-playitem (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the playlist including mark information (Fig. 8 – having a cell ID number within a program chain), the mark information providing presentation information on first and second still images (Fig. 11 – C_IDN#1 having a navigation pack containing presentation control information; Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12) to

provide for at least skipping from reproducing the first still image to reproducing the second still image (Fig. 8 – program chains skipping between various cells, having still images), the playitem indicating an in-point and an out-point of the first clip stream file, the sub-playitem indicating an in-point and an out-point of the second clip stream file for reproducing the audio data (Fig. 27, Col. 35, lines 45-61 – user defined program chain), the first clip information file (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33) including a mapping information between a presentation time and a unit of the first clip stream file and the second clip information file including a mapping information between a presentation time and a unit of the second clip stream file (Col. 12, lines 26-33 – each VOBU having playback time of group of pictures, images respective of VOBU; Col. 14, lines 11-15 - each respective video pack having also a recorded presentation time stamp; Fig. 12), the first and the second clip information file corresponding to the first and the second clip stream files (Fig. 11 – first VOBU having video pack which comprises images wherein examiner takes first image of first video pack to be image #1 of initial VOBU and first image of first video pack of secondary VOBU to be image #2; Col. 12, lines 26-33), respectively.

Claims 16, 22, 28 and 34 are rejected under the same grounds as claim 2.

Claims 17, 23, 29 and 35 are rejected under the same grounds as claim 3.

Claims 18, 24, 30 and 36 are rejected under the same grounds as claim 4.

Claims 19, 25, 31 and 37 are rejected under the same grounds as claim 5.

Claims 20, 26, 32 and 38 are rejected under the same grounds as claim 6.

Claims 21, 27, 33 and 39 are rejected under the same grounds as claim 7.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Choi whose telephone number is (571) 272-9594. The examiner can normally be reached on Monday - Friday 9:00AM - 5:30PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621

/Michael Choi/
Examiner, Art Unit 2621